

96-E-39

C.1

ARCHIVAL COPY

National Defense University
National War College

The Evolution of the National Reconnaissance Office:
Out From Deep Black Space and into the Defense Bureaucracy

Laurie S Kelly
Course 3, Seminar F
Ambassador Peter Sommer, Seminar Leader
Dr W Joshua, Faculty Advisor
December 18, 1995

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 1996		2. REPORT TYPE		3. DATES COVERED 00-00-1996 to 00-00-1996	
4. TITLE AND SUBTITLE The Evolution of the National Reconnaissance Office: Out From Deep Black Space and into the Defense Bureaucracy				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) National War College, 300 5th Avenue, Fort Lesley J. McNair, Washington, DC, 20319-6000				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT see report					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 17	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

The Evolution of the National Reconnaissance Office: Out From Deep Black Space and into the Defense Bureaucracy

Introduction

The National Reconnaissance Office (NRO) was created on August 25, 1960, after months of debate among White House, the Central Intelligence Agency (CIA), the Air Force and the Defense Department officials. Its mandate was to design, acquire and manage photoreconnaissance systems. For about three decades the agency was concealed from public view, and notably, it was also shielded from much scrutiny from within the Department of Defense and the Intelligence Community. Decades later, the agency is no longer shrouded in absolute security, and the nature of its internal politics and changes in its relations with the Department of Defense, the military Services, national policymakers and the U S Congress are becoming apparent.

The NRO is a classic example of the bureaucratic politics model as described by Kozak, Halperin and others. Although the agency is fairly unique in its mission and its secrecy, it exhibits ordinary bureaucratic behavior with regard to its internal politics and in its relations with other Government entities. Most of David Kozak's twelve "substantive points" about the behavior of bureaucratic organizations are very accurate descriptions of the NRO, and six of them appear to be particularly relevant. As tailored to this discussion, they are:

- 1 The NRO is made up of two separate bureaucracies, each of which is driven by agency specific interests

- 2 The bureaucracies that make up the NRO are involved in long-term competition and struggles for various stakes and prizes with each other. The NRO as an agency is also in competition with other agencies

3. Competition within the agency has developed into a pattern of struggle

- 4 Policymaking within the organization--and the policy applied to it--is governed by bureaucratic politics and is characterized by bargaining, accommodation and compromise

- 5 The NRO has enjoyed the support and trust of its clients in the U S Government, this past record is part of its bureaucratic strategy

- 6 Current proposals for organizational change and reform are policy motivated and are a source of political pressure, conflict and turmoil

Mr Kozak's points are good descriptors of the past and present and are likely to be good predictors of the future. This paper will elaborate on these six points (hereafter referred to by

number and with a "shorthand" description) and describe, first, how bureaucratic politics played in the establishment of the NRO, second, the organizational politics that dominated its existence for about three decades, and finally, the current political environment in which the NRO operates.

The Creation and Concealment of an Agency

The National Reconnaissance Office was an innovation of the Eisenhower Administration, that was born out of a combination of bureaucratic politics and top-priority national security concerns. The President was greatly concerned with national security and intelligence programs and used the bureaucratic machinery to assist him in solving the problems that limited his ability to reach his national security goals. Two separate studies undertaken during the later years of his Administration pointed to the need for him to create the NRO.

First, President Eisenhower established a "blue ribbon" panel of experts¹ to consider options for preventing a surprise nuclear attack on the United States from the Soviet Union (Burrows, 66). Reporting back to the President in 1955, the group offered their view of the chief national security concern:

" we must find ways to increase the number of hard facts upon which our intelligence estimates are based, to provide better strategic warning, to minimize surprise in the kind of attack, and to reduce the danger of gross overestimation or gross underestimation of the threat. To this end, we recommend adoption of a vigorous program for the extensive use, in many intelligence procedures of the most advanced knowledge in science and technology" (Burrows, 67)

A second study was led by Secretary of Defense Thomas Gates to review the organization of the Government's intelligence apparatus and propose changes. The Defense Secretary was reacting out of frustration with "feuding, self indulgence, waste of time and resources" that characterized the "entire Defense intelligence establishment," but space reconnaissance programs

¹Known as the Technological Capabilities Panel it was headed by James R. Killian, Jr., of MIT, and included other notables such as Edwin H. Land of Polaroid and James G. Baker, the Harvard astronomer and optics expert who had done the highly innovative lens work for George Goddard.

in particular. Among other things, the panel recommended creating an organization to centralize management and coordinate reconnaissance programs (Burrows, 131)²

No action was ever taken to follow through on these recommendations, however, until the Administration was motivated by what proved to be a cataclysmic political event (Burrows, 77). On May 1, 1960, the U-2 reconnaissance aircraft that Francis Gary Powers was piloting over the Soviet Union was shot down, with the pilot captured alive and the airframe retrieved, for the Soviets to show to the world³. Soviet Premier Nikita Khrushchev seized the opportunity to protest stridently the U.S. violation of his country's sovereignty. This placed President Eisenhower in an embarrassing political position but, more importantly in this context, it forced the cancellation of the previously secret U-2 overflight program over the Soviet Union and left the United States blind once again to an intimidating Soviet military threat. It was in this context that the Administration decided to accelerate the existing but nascent technology programs that would eventually lead to the deployment of reconnaissance satellites. The program was assigned top national priority because, if successful, the new systems would allow reconnaissance operations to be resumed above the earth's atmosphere so as to avoid altogether the threat from Soviet surface-to-air missiles and fighters.

It was in this climate of finding a solution to a singular national security need that led to the establishment of the National Reconnaissance Office (NRO). It was formed on August 25, 1960, with the approval of the President and the National Security Council. It was made up of elements from the Air Force and the CIA that had existing programs in reconnaissance. In so doing, an organization of classical bureaucratic politics character was established.

²The Joint Study Group was charged with conducting an extensive review of all defense intelligence programs. Although the final report was not published until December 1960, its conclusions were well known within the Administration. In addition to creating the NRO, it contained several recommendations for adding structure to the emerging U.S. intelligence apparatus, including two that led to the formation of the Defense Intelligence Agency and the National Photographic Interpretation Center in 1961.

³The CIA had been operating the U-2 program since 1956 and had conducted twenty deep penetrations over Eastern Europe, the western Soviet Union, the Ukraine, Siberia and Kamchatka during that period.

A notable feature was the security surrounding the agency. No sooner than the NRO was created the fact that the agency existed was concealed from public view. More restrictively, the details of its organization and operations were even concealed from a vast majority of the Intelligence Community. The Director of the NRO was provided cover title as Under Secretary of the Air Force and Director of the Office of Space Systems (Burrows, 127). The NRO was the epitome of the super-secret, or "black" intelligence program⁴.

The deep security had the effect of insulating the agency from the rest of the Department of Defense and Intelligence Community bureaucracy. It was also insulated from Congressional oversight. There was strong consensus among the White House, the Department of Defense and Congress that this insulation served the national interest.

The Organizational Politics in the Establishment of the NRO

One of the aims in establishing the NRO was to solve bureaucratic battles. The word "National" in its title was specifically intended to convey the decision to create "An agency of National character, including OSD [the Office of the Secretary of Defense] and the CIA and not the Air Force alone (Burrows, 131) "

The Air Force and CIA had been engaged in bureaucratic warfare over reconnaissance for several years. One battleground was the U-2 program. Although the CIA managed the development of the aircraft, General Curtis LeMay, Commander in Chief, Strategic Air Command (SAC), sought to control the U-2 reconnaissance operation since it began in 1955 (Burrows, 74). The Air Force also vied to control the analysis of the data collected during the reconnaissance.

⁴The reasons for the secrecy were principally driven by national security policy. When President Kennedy took office, he strengthened the security measures surrounding the NRO not only for national security policy reasons but also for tactical reasons. Interesting in terms of bureaucratic politics in of itself, he saw the need to (1) avoid public debate over the sufficiency of U.S. verification and monitoring capabilities for the emerging arms control negotiations, (2) preserve his foreign policy options and avoid vulnerability to a well informed opponent by denying him access to key information, (3) avoid divulging technical capabilities as fallout from a *public* struggle between the CIA and the Air Force over their respective roles in reconnaissance, (4) protect sources and methods, (5) avoid embarrassing the Soviets over collection capabilities so as to minimize risk of them taking further hostile action to neutralize those capabilities and (6) avoid embarrassing less developed countries, whose sensitivities were high to U.S. espionage against them.

missions. But President Eisenhower and CIA Director Allen Dulles continued to be highly suspicious of the Air Force's motivations--SAC having contrived the "bomber gap" in 1956 and the "missile gap" in 1960 as arguments for enhancing the Command's strategic offensive capabilities⁵. The opinion of one CIA analyst that "To the Air Force, every fly speck in the U-2 pictures was a missile (Burrows, 93)" seemed to characterize the attitude of many national security decisionmakers toward the Air Force--including the President.

For its part, the CIA evidently recognized early on that satellite reconnaissance would be an important adjunct to the Agency's mission. In 1958, Allen Dulles obtained the President's approval for the CIA to manage both the U-2 overflight program and the CORONA photoreconnaissance satellite program⁶. The CIA was assigned responsibility to fund and manage the satellite development and the Air Force was given a supporting role that included launch, on-orbit operations (e.g. spacecraft health and safety), and retrieval of the film pods that the satellite ejected upon completing a mission (Burrows, 100). The CIA's dominant position was transferred into the NRO structure upon its establishment in 1960. Moreover, the new organization would be headed by two civilians: the Under Secretary of the Air Force as director and a CIA employee as deputy director (Burrows, 131).

The two organizations were fighting battles that involved different bureaucratic stakes. On a prosaic level, they fought over their relative shares of a growing reconnaissance budget. This was a key issue because the NRO was established as an acquisition organization, and as such, budget was an essential element of the mission and a predictable source of tension within the organization. But control over spacecraft collection operations and analysis of data after it was collected were also Air Force aims. This being the more quintessential issue of the two, this battle

⁵Although he lost the battle, CINCSAC won a modest tactical victory because SAC was given responsibility for training the CIA pilots. Later, in 1957, SAC received its own U-2 fleet to operate. Graham Allison discusses this struggle as it later surfaced during the Cuban missile crisis. It is also interesting that SAC was simultaneously waging a battle within the Air Force over the primacy of strategic offensive capability versus tactical defense.

⁶The first CORONA satellite was launched in August 1960. The U.S. Government declassified details concerning this first satellite reconnaissance program in May 1995.

was about controlling the assets that were providing information that influenced decisionmaking at the highest levels of the U S. government on the most important national security issue of that time (Point #1, Agency-specific interests drive the NRO bureaucracy; and #2, NRO component agencies are in competition for struggle).

It would be a mistake to overemphasize the apparent narrowness of the CIA and Air Force with regard to bureaucratic self-interest. In fact, organizational self-interest is a legitimate and essential part of every large bureaucracy. Agencies with large missions such as the Department of Defense depend upon diverging views to develop good policy and their ability to do so effectively requires an ability to aggregate diverse interests (Jefferies, 116). To form an aggregate was certainly President Eisenhower's objective in creating the NRO in the first place. If he had been sufficiently irritated with Air Force organizational tactics, he could have excluded the Service from the new organization. Instead, he intended that the two should combine, each bringing its relative strengths into the organization--satellite development and acquisition management for the CIA and satellite launch and operations from the Air Force.

Another feature of the NRO is that it apparently enjoyed unusually wide latitude in carrying out its development and engineering activities (Point #5, NRO enjoys support and trust of its clients in the USG). This was a direct attribute of its secrecy and isolation from the rest of the Department of Defense. Ben R. Rich⁷ described Lockheed's success in building the U-2 and SR-71 reconnaissance aircraft in collaboration with the CIA because they were allowed "to bypass the Air Force's labyrinthine specifications and regulations in favor of a small group working informally 'in a black, skunky way' (Burrows, 74)." Jimmie D. Hill, who has served as Deputy Director of the NRO almost since its beginning, explains that the NRO had few constraints upon its operation.

"Those kinds of [national security] questions that were so overwhelmingly important to the nation in terms of impacting the strategic balance between the U S and U S S R demanded answers and so virtually anything that was deemed to be technically feasible that

⁷Mr. Rich was head of the Lockheed Advanced Development Corporation, or 'Skunkworks', which built the U-2 and a successor system, the SR-71 'Blackbird'. The Skunkworks is known for its success in pioneering development and rapid production of advanced technology systems under strict security conditions.

these various companies would come up with to get some of those answers would essentially be done (Hill/Kenner, 4) "

Richard M Bissell, Jr., who managed the early U-2 program, explained that the NRO operated in an atmosphere of trust in its early days According to his recollections, not only did the trust exist between the CIA and the U S companies that were developing the systems, but also the between the CIA and Congress (Burrows, 74). His recollections are consistent with the historical record regarding the overall relationship between the U S Congress and the CIA during the period 1947 to 1974 The activities of the Intelligence Community were overseen by a few senior members of the Armed Services and Appropriations Committees in each chamber and virtually all the oversight was conducted behind closed doors The House Armed Services Committee was a "stay in touch" committee whose members were concerned about "meddling with intelligence" (Smist, 6)

The New Politics of National Reconnaissance

In the 1990s the political environment in which the NRO exists is substantially different than the one in which it was formed Probably the most significant factor is the activist role that the U S Congress has played with regard to intelligence since the mid-to-late 1970s (Smist, 6)

Congress' political agenda concerning the NRO is related to broad issues regarding the U S Intelligence Community and the Central Intelligence Agency As such, the debate over the future role of the Intelligence Community in a greatly reduced threat environment has cascaded down to a debate over priorities for reconnaissance and the NRO But Congress also has a specific agenda regarding the NRO's budget The NRO is an agency of the Department of Defense whose budget is an element of the budget of the Director of Central Intelligence Known as the National Reconnaissance Program (NRP), the NRO budget is approved both by the Secretary of Defense and the Director of Central Intelligence (See Appendix) Although the exact amount is classified, the Fiscal Year 1995 NRP budget is reported to be about \$7 billion, or one-fourth of the total

authorization for the Intelligence Community that year (Pincus, 13 June and 21 July 94) From Congress' perspective, extreme budget pressures make this relatively large fund a tempting target For example, in September 1995, Senate appropriators sought to take more than \$1 billion from the "once-sacrosanct spy satellite program" to help speed up purchases of hundreds of millions of dollars worth of big-ticket defense items, including the B-2 bomber (Morgan and Pincus). The target of the raid was \$1.6 billion in "carryover funds" previously appropriated but unspent that were carried on the NRO books to pay future costs of launching new satellite programs⁸

Members of Congress are also concerned about reducing the very high expenses associated with satellite reconnaissance (Smith) New policy alternatives to funding the NRO--such as the spread of commercial imaging technology--are providing a vehicle for intervening in the budget and as justification to "chop" it (Cole) Other policy developments such as the development of "small" satellites has been used as an opportunity for Congress to recommend to NRO officials that they consider building these in place of the large ones currently planned (Pincus, 5 Oct 95) Regardless of the merits of any of these proposals, some members of Congress think that NRO officials are not receptive to their proposals. Some are quick to criticize NRO officials publicly "for tunnel vision and a bias against ideas that threaten the existing program they want to follow" (Pincus, 5 Oct 95) This reaction is highly predictable according to the bureaucratic model From the NRO's perspective, the NRP budget is the principal means that the agency has to carry out its mission of satellite acquisition As such, the organization is apt to be highly sensitive to decisions made externally concerning its budget and equally sensitive to policy decisions--such as which type of satellites should be built--because they will most surely have budgeting implications (Halperin, 27) (Point #6, Proposals for change are policy motivated and a source of political pressure and conflict)

⁸There are interesting subtexts to this move One is that legislators sought to portray the raid publicly as an example of vigilant oversight of the secret intelligence accounts and not as Defense offsets The other is that the program increases were not ones that the military Services wanted or needed Congress carried them out for their own purposes

The relationship between the NRO and the Department of Defense--its true parent organization--is also evolving. For most of its history the NRO enjoyed considerable independence because of the priority accorded the mission and the trust surrounding it. Current political realities are forcing that to change

As with Congress, the principal management issue is the budget. The NRP is being targeted for reduction because of its relatively large size. Other pressures stem from the fact that the NRP is contained within Intelligence Community budget, and the Intelligence Community budget is within the Defense budget, therefore pressure to reduce the DoD budget indirectly puts pressure on the NRO budget. Consistent with the bureaucratic politics model, this is usually resolved by political bargaining among the Secretary of Defense, the Director of Central Intelligence, the Office of Management and Budget, and Congress, in which everyone generally gives a little ground (Berkowitz, 145)⁹. Continued budget pressures will make this bargaining a continuing necessity and a long-term source of tension in the NRO's relations not only within the Department of Defense, but also within the Intelligence Community (Point #4)

Another organizational issue concerning the NRO is its relationship to other Defense programs. In recent years, many DoD elements concerned with intelligence support have developed a formal DoD policy position that national reconnaissance systems do not provide adequate support to military operations. This policy position has become a powerful force for change. Consistent with the bureaucratic model, part of the "solution" to the policy problem is to reorganize. As a result, some NRO programs are being integrated with others (Scott, 17 April 95) and NRO acquisition responsibilities are being subordinated within the Department. Separate within the DoD until now, the NRO acquisition system has been subordinated to the management of a newly established Under Secretary of Defense for Space Acquisition and Technology

⁹The problem is that, with the intelligence and reconnaissance budget linked to defense spending levels, intelligence policy decisions are being made on the basis of the larger DoD needs and not intelligence requirements

Programs (Scott, 20 Feb 95) Also, the NRO's imagery exploitation and dissemination activities have been subordinated to a newly created Defense agency, the National Imagery and Mapping Agency The new Agency's authorities include program and budget, research development and acquisition, exploitation and production of all imagery reconnaissance and mapping systems in the Department of Defense and Intelligence Community (CJCS, 22 Nov 95) (Point # 2, The NRO is in competition with other agencies over various stakes, and #6, Proposals for change are policy motivated and are a source of political pressure)

Dr John Deutch, Director of Central Intelligence, having transferred from the position of Deputy Secretary of Defense to his current post, is working in tandem with the current Secretary of Defense to carry out these reforms To a certain degree, the reorganization and consolidation currently underway bears strong resemblance to the process that Secretary Gates managed thirty five years ago to give the NRO a centralizing role. The difference is that the current reorganization emphasizes the role of Defense in reconnaissance whereas the older one emphasized the role of the CIA on behalf of the national intelligence community In today's reorganization the career CIA is balking at what many of them believe is overemphasis on defense intelligence (Smith and Pincus, 10 Dec 95) (Point #6, Proposals for change are policy motivated and a source of pressure, conflict and turmoil)

This suggests that the internal NRO struggle may shift to a CIA-motivated power struggle If so, it may be more subtle than the Air Force struggle, as neither of these management reorganizations necessarily forces a major change in the way the NRO carries out the development of reconnaissance satellites--the principal activity for which it was established Direct threats to its mission notwithstanding, it is clear that the NRO enjoys less organizational freedom within the Department of Defense than at the time of its creation (Point#3, Competition has developed into a pattern of struggle)

From Deep Black Space to the Mainstream of the Defense Bureaucracy

The National Reconnaissance Office remained largely shielded from public view for the three decades. In 1992, the Secretary of Defense declassified the fact that the NRO existed, and in 1995, declassified its mission statement and basic organizational structure (See Appendix). The substantial reduction of the Soviet military threat removed the original justification for keeping the NRO a dark secret and other policy issues reviewed herein have been shown to be additional forces of change. The NRO is resisting these forces, whether from the U.S. Congress or the DoD. This outcome is consistent with Kozak's discussion of the norms of bureaucratic politics and organizational behavior that were summarized in this Introduction.

In closing, Chris Jefferies' insights into bureaucratic dynamics are also relevant and are worth a brief mention. He postulated that:

- No issue is decided once and for all in bureaucratic politics, and
- The relative authority, influence and responsibility of any organization is likely to wax and wane over time (Jefferies, 117-119)

This is precisely what has occurred. An independent NRO is no longer thought to be as useful as it once was, the bureaucratic process has worked to subordinate it more strongly to the Department of Defense. Secondly, the fact that the NRO has been subordinated suggests that the agency's influence within the Defense bureaucracy is on the wane. An alternative interpretation suggests that the influence of the CIA over the NRO is on the wane with the current Defense management team and the Director of Central Intelligence. This interpretation is supported by the DoD policy position that the NRO must support defense-wide needs, even perhaps at the expense of national needs. Whether the CIA chooses to fight and what the effect on the new NRO might be, is another question that is answerable only in the future.

Thirty-five years after its creation we are having a glimpse at a new National Reconnaissance Office whose new features are less secrecy, less administrative insulation and a much closer association with the mainstream of the Department of Defense bureaucracy. The constant is organizational politics and competition for influence and power, now entering another phase.

Appendix

National Reconnaissance Office



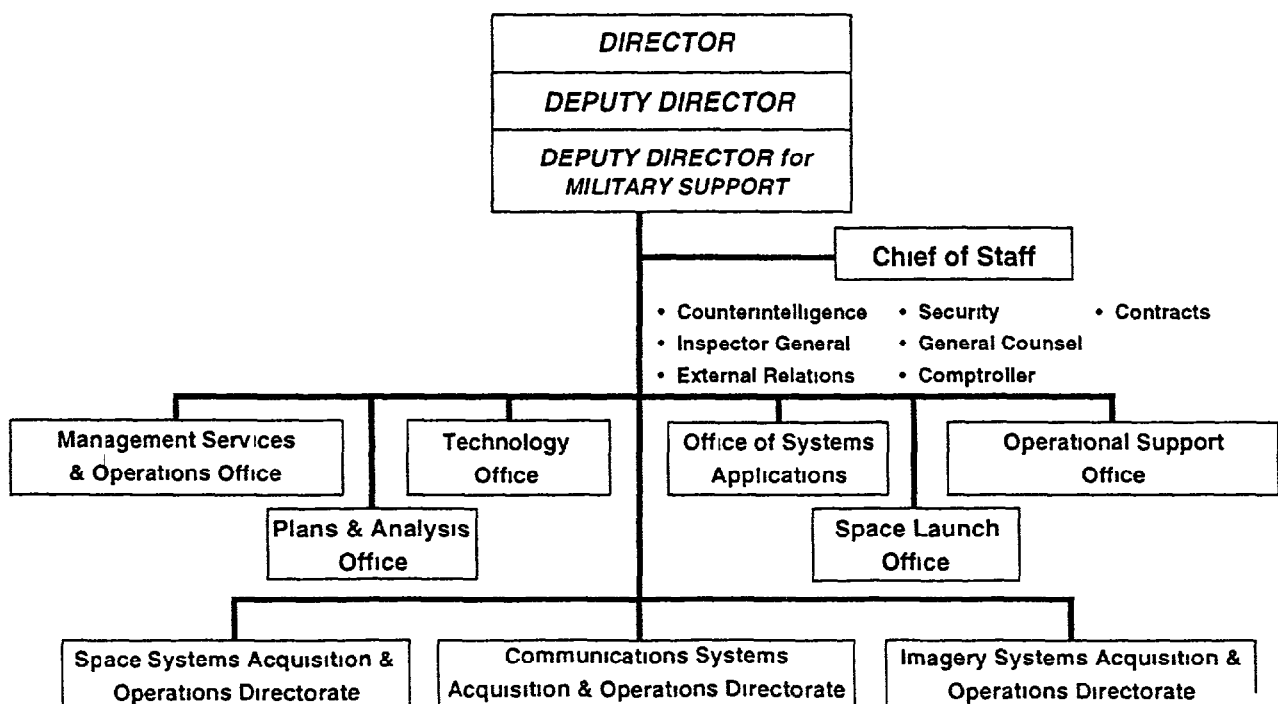
National Reconnaissance Office

The National Reconnaissance Office (NRO) is the national program to meet the US government needs through spaceborne reconnaissance. The NRO is an agency of the Department of Defense and receives its budget through that portion of the National Foreign Intelligence Program (NFIP) known as the National Reconnaissance Program (NRP), which is approved both by the Secretary of Defense and the Director of Central Intelligence (DCI). The existence of the NRO was declassified by the Deputy Secretary of Defense, as recommended by the Director of Central Intelligence, on September 18, 1992.

The mission of the NRO is to ensure that the US has the technology and spaceborne assets needed to acquire intelligence worldwide. This mission is accomplished through research, development, acquisition, and operation of the nation's intelligence satellites. The NRO's assets collect intelligence to support such functions as indications and warning, monitoring of arms control agreements, military operations and exercises, and monitoring of natural disasters and other environmental issues.

The Director of the NRO is appointed by the President and confirmed by the Congress as the Assistant Secretary of the Air Force for Space. The Secretary of Defense has the responsibility, which is exercised in concert with the Director of Central Intelligence, for the management and operation of the NRO. The DCI establishes the collection priorities and requirements for the collection of satellite data. The NRO is staffed by personnel from CIA, the military services, and civilian Department of Defense personnel.

National Reconnaissance Office



Bibliography

Allison, Graham T , "Conceptual Models and the Cuban Missile Crisis," in Halperin and Kanter, Readings in American Foreign Policy, Washington: Brookings Institution, 1974, pp. 45-84.

Berkowitz, Bruce D , and Goodman, Allan E., Strategic Intelligence for National Security, Princeton, New Jersey: Princeton University Press, 1989.

Burrows, William E , Deep Black: Space Espionage and National Security, New York: Random House, 1986

Cole, Jeff, "New Satellite Imaging Could Soon Transform the Face of the Earth," The Wall Street Journal, 30 November 1995, A1+

Halperin, Morton H , Bureaucratic Politics and Foreign Policy, Washington: Brookings Institution, 1974, esp Chap 3 and 13, pp 26-62, 235-260

Hill, Jimmie D , and Kenner, Laurel, Interview Transcript, (El Segundo, CA) The Daily Breeze, 23 February 1994

Jefferies, Chris, "Bureaucratic Politics in the Department of Defense. A Practitioner's Perspective," in David C Kozak and James M Keagle, eds , Bureaucratic Politics and National Security Theory and Practice, Boulder: Lynne Rienner, 1988, pp 109-121

Klass, Philip J , "CIA Papers Reveal Spy Satellites' Role," Aviation Week and Space Technology, 16 January 1995, p 53

Kozak, David C , "The Bureaucratic Politics Approach: The Evolution of the Paradigm," in Kozak and Keagle, Bureaucratic Politics and National Security Theory and Practice, Boulder: Lynne Rienner, 1988, pp 3-15

Mintz, John, "Whose Are the Eyes that Spy?," The Washington Post, 8 February 1994, D1+.

Morgan, Dan and Pincus, Walter, "\$16 Billion in NRO Kitty Helped Appropriators Fund Pet Projects," The Washington Post, 5 October 1995, A15

Pincus, Walter, "White House Labors to Redefine Role of Intelligence Community," The Washington Post, 13 June 1994, A8+

-----, "House Votes \$28 Billion for Intelligence," The Washington Post, 21 July 1994

-----, "Congress Debates Adding Smaller Spy Satellites to NRO's Menu," The Washington Post, 5 October 1995, A14

Scott, William B , "'Architect' to Reshape Defense Space Policy," Aviation Week and Space Technology, 20 February 1995, p. 50

-----, "USAF, NRO Attack Costs," Aviation Week and Space Technology, 17 April 1995, p. 29.

Smist, Frank J , Jr , Congress Oversees the United States Intelligence Community, Knoxville: University of Tennessee Press, 2d ed , 1994.

Smith, R Jeffrey, "As Woolsey Struggles, CIA Suffers," The Washington Post, 10 May 1994, A1+.

Smith, R. Jeffrey and Pincus, Walter, "Deutch Leaving No Doubt Who's in Charge of Intelligence," The Washington Post, 10 December 1995, A6

U S. Department of Defense, Chairman of the Joint Chiefs of Staff, "Recommendation to Establish the National Imagery and Mapping Agency," Electronic Message to Multiple DoD Addressees. 212214Z Nov 95